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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/531,572	04/18/2005	Takashi Kenmoku	03500.017652	2325

5514 7590 10/31/2007
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EXAMINER	
HANLEY, SUSAN MARIE	
ART UNIT	PAPER NUMBER
1651	

MAIL DATE	DELIVERY MODE
10/31/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/531,572	TAKASHI KENMOKU	
	Examiner	Art Unit	
	Susan Hanley	1651	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 October 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *21-37* is/are pending in the application.

4a) Of the above claim(s) *22,23 and 25-37* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *21 and 24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

This application has been accepted for the Patent Prosecution Highway pilot program. In view of this status, the restriction requirement mailed 10/9/07 is withdrawn in favor of the following restriction requirement and first action on the merits that are based on the claims allowed by the JPO.

Claims 1-20 have been cancelled and claims 21-27 have been added.

Election/Restrictions

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 21 and 24, drawn to a polyhydroxyalkanoate comprising a 3-hydroxy-ω-[(phenylmethyl)oxy]alkanoic monomer of formula (1).

Group II, claim(s) 22, drawn to a polyhydroxyalkanoate comprising a monomer of formula (1) and at least another monomer of formula (2) or (3).

Group III, claim(s) 23, drawn to a polyhydroxyalkanoate comprising a monomer of formula (1) and at least another monomer of formula (4) which includes the selection of R from formula (5) and (8)-(17).

Group IV, claim(s) 25, 27, 29, 31-37, drawn to a method of making a polyhydroxyalkanoate of formula (1).

Group V, claim(s) 26, drawn to drawn to a method of making a polyhydroxyalkanoate comprising a monomer of formula (1) and at least another monomer of formula (2) or (3).

Group VI, claim(s) 28 and 30, drawn to method of making a polyhydroxyalkanoate comprising a monomer of formula (1) and at least another monomer of formula (1) and at least another monomer of formula (4) which includes the selection of R from formula (5) and (8)-(17).

The inventions listed as Groups I-VI do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:
A polyhydroxyalkanoate comprising the monomer of formula (1) has been disclosed by Yano et al. (EP 1,340,776; cited in the IDS filed 4/18/05) as formula (38) on page 27. Since this monomer has been disclosed by the prior art, the invention lacks a special technical feature over the prior art. It is noted that the date of the Yano document falls after the effective filing date for this national stage application (10/23/03) and the dates of the documents for which foreign priority has been claimed (JP 2002-309786, filed 10/24/02, and JP 2003-356749, filed 10/16/2003). However, the foreign priority documents are in Japanese and a certified translation of each document has not been filed. Hence, the foreign priority claim has not be perfected. Thus, the date of the Yano document predates the effective filing date of this application, and is properly used as prior art.

This application contains claims directed to more than one species of the generic invention. These species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1.

The species are as follows:

If Group III or VI, is elected, Applicant is required to elect,

a) the value of R in formula (4) from formula (5) or (8)-(17) if Group III is elected; OR

b) the value of the monomer for formula (22) from formula (20) or (21); if formula (20) is elected, elect the value of R from formula (25), and (9)-(17) if Group VI is elected.

Applicant is required, in reply to this action, to elect a single species to which the claims shall be restricted if no generic claim is finally held to be allowable. The reply must also identify the claims readable on the elected species, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered non-responsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an

allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

The claims are deemed to correspond to the species listed above in the following manner:

claims 23, 28 and 30.

The following claim(s) are generic: no claim is generic for the specie elections.

The species listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the species lack the same or corresponding special technical features for the following reasons: The specie fail to provide a special technical feature over the prior art because the phenylthioether corresponding to formula (11) has been disclosed by Tagaki et al. (1999; page 8317; cited in the IDS filed 4/18/05).

During a telephone conversation with 10/25/07 on Mr. Jason Okun a provisional election was made without traverse to prosecute the invention of Group I, claims 21 and 24 (which correspond to the subject matter of the originally elected product claims 1, 4 and 6). Affirmation of this election must be made by applicant in replying to this Office action. Claims 22, 23 and 25-37 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless -
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1 and 4 are rejected under 35 U.S.C. 102(a) as being clearly anticipated by Yano et al. (EP 1,340,776; cited in the IDS filed 4/18/05).

Yano discloses a polyhydroxyalkanoate formula (38) on page 27 which anticipates the structure of instantly claimed formula (1). The cited document is by another because instant Inventor Kozaki is not named as an inventor for EP 1,340,776. Inventors Sugawa-Etsuko, Fukui and Imamura are named for the EP document but are not named as inventors for the instant application.

Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

Claims 21 and 24 are rejected under 35 U.S.C. 102(e) as being anticipated by US 6,911,520, US 6,908,721, US 6,649,380 or US 6,645,743.

The applied references have a common inventor with the instant application. Based upon the earlier effective U.S. filing date of each reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

The '520 patent discloses a copolymer comprising the monomers of structures (1), (2), (3) or (4) (col. 8-9) and an additional monomer unit comprising 3-hydroxy-ω-[(phenylmethyl)oxy]alkanoic acid. See structures (17; basic monomer unit having an R-group) and (29; an phenylmethyl oxy R-group for structure 17) in columns 16 and 19, respectively. The combination of these structures anticipates the claimed structure (1). The claim language for instant claims 21 and 24 is "open" (comprising). Hence the presence of additional substances in a composition comprising the claimed 3-hydroxy-ω-[(phenylmethyl)oxy]alkanoate monomer meets the instant claim limitations.

The '721 patent discloses a copolymer comprising the monomers of structures (1) or derivatives thereof (col. 7-8) and an additional monomer unit comprising 3-hydroxy-ω-[(phenylmethyl)oxy]alkanoic acid. See structures (5) (basic monomer unit having an R-group) and (17) (a phenylmethyloxy R-group) in columns 9 and 11, respectively. The combination of these structures anticipates the claimed structure (1). The claim language for instant claims 21 and 24 is "open" (comprising). Hence the presence of additional substances in a composition comprising the claimed 3-hydroxy-ω-[(phenylmethyl)oxy]alkanoate monomer meets the instant claim limitations.

The '782 patent discloses a copolymer comprising the monomer of structures (1) (see col. 3) having an R group that has a phenylmethyloxy group as in structure (15), see in column 6. When the R-group for structure (1) is (15) the claimed structure is anticipated.

The '743 patent discloses a copolymer comprising the monomers of structure (1) and an additional monomer unit comprising 3-hydroxy-ω-[(phenylmethyl)oxy]alkanoate that bears an R-group. See structure (2) (basic monomer unit having an R-group). When R is the phenylmethoxy group of structure (14) (see col. 13), the combination of these structures anticipates the claimed structure (1). The claim language for instant claims 21 and 24 is "open" (comprising). Hence the presence of additional substances in a composition comprising the claimed 3-hydroxy-ω-[(phenylmethyl)oxy]alkanoate monomer meets the instant claim limitations.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 21 and 24 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 15 of U.S. Patent No. 6,911,520. Although the conflicting claims are not identical, they are not patentably distinct from each other because are not patentably distinct from each other because claimed subject matter claimed in claims 21 and 24 of the instant application significantly overlap the scope of claims of the '520 patent : chemical structures of PHA copolymers claimed in both documents claim a monomer unit comprising a 3-hydroxy-ω-[(phenylmethyl)oxy]alkanoate that corresponds to structure (1) of instant claim 21 (see rejection above).

Claims 21 and 24 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 8 of U.S. Patent No. 6,908,721. Although the conflicting claims are not identical, they are not patentably distinct from each other because are not patentably distinct from each other because claimed subject matter claimed in claims 21 and 24 of the instant application significantly overlap the scope of claims of the '721 patent : chemical structures of PHA copolymers claimed in both documents claim a monomer unit comprising a 3-hydroxy-ω-[(phenylmethyl)oxy]alkanoate that corresponds to structure (1) of instant claim 21 (see rejection above).

Claims 21 and 24 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 2 of U.S. Patent No. 6,649,380. Although the conflicting claims are not identical, they are not patentably distinct from each other because are not patentably distinct from each other because claimed subject matter claimed in claims 21 and 24

of the instant application significantly overlap the scope of claims of the '380 patent : chemical structures of PHA copolymers claimed in both documents claim a monomer unit comprising a 3-hydroxy-ω-[(phenylmethyl)oxy]alkanoate that corresponds to structure (1) of instant claim 21 (see rejection above).

Claims 21 and 24 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 2 of U.S. Patent No. 6,645,743. Although the conflicting claims are not identical, they are not patentably distinct from each other because are not patentably distinct from each other because claimed subject matter claimed in claims 21 and 24 of the instant application significantly overlap the scope of claims of the '743 patent : chemical structures of PHA copolymers claimed in both documents claim a monomer unit comprising a 3-hydroxy-ω-[(phenylmethyl)oxy]alkanoate that corresponds to structure (1) of instant claim 21 (see rejection above).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susan Hanley whose telephone number is 571-272-2508. The examiner can normally be reached on M-F 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Wityshyn can be reached on 571-272-0926. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Susan Hanley
Patent Examiner
Art Unit 1651

SANDRA E. SAUCIER
PRIMARY EXAMINER